SPE NEWS BULLETIN

Issued Monthly to all Members of the Society of Plastics Engineers

Vol. 2 No. 1 January, 1946

S. P. E. STARTS NEW YEAR WITH PLASTICS EXHIBIT

CONVENTION HALL SHOW FEATURES 100 BOOTHS

Machines, Materials and Products on Exhibit

The Convention Hall Exhibit is of the greatest interest to anyone connected with the ever-changing business of plastics. Here, in more than a hundred booths, are displayed the products of most of the leaders in the various fields, from the machines designed to turn out finished products themselves. The new plastics, and new kinds of products, and the old plastics with their new applications and products, will be on show.

Limitations of space prevent our printing here a description of all the manifold points of interest, but we can choose at random brief descriptions of some of the booths, and to round out the picture, give a list of exhibitors corrected up to press time.

Celanese Plastics

This booth at the Plastics Exhibit points up the practically universal use of cellulosic plastics. Divided in six sections, each of which is devoted to a large market for plastics, the display seeks to act as an inspiration to the fabricating industry to strive for ever widening fields of influence. For example the section headed "Buildings" shows an artist's conception of a modern bathroom with dozens of probably Celanese Plastics articles marked with map pins . . . a wide array of tools and safety guards is headlined "Industry" . . . applications to automotive aviation and railroading are grouped under "Transportation" . . . the importance to the "Electrical Industry" is demonstrated in another panel . . . many varieties of containers made from Celanese Plastics point up a most

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Partial List of Abstracts Gives Preview of Talks To Be Presented Jan. 7-9

The eyes of the plastics world are focused this week on the Annual Meeting and Plastics Exhibit of the S. P. E. in Detroit, where the latest engineering and technological advances will be shown. A list of speakers and their topics, shown elsewhere in this issue, is indicative of the liberal education in modern plastics techniques to be gained by attendance.

"LOW PRESSURE MOLDING — MATERIALS AND TECHNIQUE"

T. Walter Noble

A discussion of the various methods of impregnating and coating with resins various types of fillers; and the molding of these treated materials by various methods and pieces of equipment.

The various types of molding equipment are illustrated by slides, and

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SPEAKERS ANNOUNCED FOR TECHNICAL SESSIONS

Program of Annual Meeting Is Outlined

MONDAY, JANUARY 7, 1946

9:00 A. M.—Registration.

10:00 A. M. — Business Meeting — Steering Council—National Group Chairmen.

— RECESS FOR LUNCH —

1:30 P. M.—Greetings by National Chairman.

"Outline Scope of Activities". Mr. J. A. Mickey, Ford Motor Co.

Technical Sessions

I—MATERIALS

Chairman, Mr. B. E. Cash, Celanese Corp. of America.

"New Plastic Developments During the War in the U. S. A.", Dr. S. D. Douglas, Carbide & Carbon Chem Corp.

"Plastic Materials in Automotive Construction", Mr. Alexander Nixon, Fisher Body Div., G.M.C.

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NATIONAL DIRECTORS ELECTED BY S. P. E.

R. B. Bower, B. C. Stupp, J. H. Dubois, P. R. Marvin are Honored

Four new members have been elected to the National Board of Directors. They are R. B. Bower of the Indianapolis Section, B. C. Stupp of the Miami Valley Section, J. H. Du Bois of the Newark Section, and in the Milwaukee Section, P. R. Marvin, elected in place of H. R. Marshall, who though selected, declined.

B. C. STUPP

Mr. B. C. Stupp is a Graduate Industrial Engineer, having attended the General Motors Institute of Technology at Flint, Michigan. He has been associated with the Delco Products Division of General Motors for the past nine years, and is at present responsible for manufacturing as well as plastics processes at Delco, where the molding work is 100% Thermosetting. Mr. Stupp is one of the founders of the Miami Valey Section of the S.P.E.

J. H. DuBOIS

My formal schooling covered Electrical and Mechanical Engineering at the University of Minnesota and Law at Kent Law School in Chicago. The General Electric Company Student Engineering Course was taken in 1927 and I went directly into plastics at the completion of this work,

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SPE NEWS BULLETIN

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Under the Direction of Thomas E. Orr, Chairman National Publications Committee

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BULLETIN TAKES SHAPE

The New year 1946 will find the News-Bulletin growing with the society, and the S. P. E. can in this publication see the reflection of the Society as a whole. First of all, we have established a regular publication date, so that the Bulletin can be in the mails on the 15th of each month. Deadline for material is tentatively set at the 5th of each month for that month's issue. Individual members of the S. P. E. are encouraged to send items of news, personal or otherwise, to the editor.

Please note that this issue is being given a volume number and an issue number. All preceding issues will have to be considered as volume one, and this issue is Vol. II No. I.

Remember that this publication is yours: all suggestions, criticisms, etc., sent to the editor will be considered as personal favors.

* * *

Exhibitors

(Continued from Page 1)

important American industry "Packaging"; and, "Communications" is represented by radio, microphone and the omnipresent cellulosic fountain pen. New appliances using cellulose plastic are on display. The new Celanese plastic, FORTICEL, will be demonstrated at the HPM booth where it is being molded into 16 oz. dies.

Monsanto Chemical Co.

The Monsanto booths at the SPE exhibition present a broad panorama of the extensive family of Monsanto plastics. On 18 display panels are presented almost more than a hundred typical uses of these versatile materials covering some of the larger industries in which they serve — automobiles, refrigerators, radios, household goods, electrical appliances, packaging, industrial machine parts and textiles. The three screens which form a colorful background for the exhibit represent in themselves an accomplishment in plastics. They are low pressure laminated wall coverings utilizing "Thalid" a newly developed impression holding resin. The furniture

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PRESIDENT'S MESSAGE

Some fifteen years ago, when real molding material was still a novelty and dinnerware of this plastic was still selling at fancy prices in the deluxe or "better" stores, a manufacturer ran an advertisement about his dinnerware in the Saturday Evening Post or some other such magazine.

Across the top of the page in huge letters, you read the word "UNBREAKABLE". There were colored pictures of dishes and cups and saucers and a story about how nice they were. But at the end of that word "unbreakable" there was an asterisk, and when you looked down to the bottom of the page you read a foot note "Not never, but hardly ever".

That advertisement made a lasting impression upon me. The fellow who wrote it must have had a keen sense of humor, and I am sure that his honesty, his hinting of possible breakage, did not deter any prospective buyers.

Informative Labeling

Since those days, a lot of plastic products have been sold with a lot less candor. One is constantly running into people who have had sour experiences with plastics — radio cabinets that break, automobile handles that crack and drop off, ash trays that blister and burn, garters that blister the skin, "bath room" tumblers that split open, lip stick holders that won't open, etc. This sort of thing is not helping the public acceptance of plastics.

Modern Plastics Magazine is to be highly commended for its active and persistent campaign for "informative labeling" of plastic products. This will do much to educate the public on what they should expect of plastics and will discourage the sort of overstatement which seems to be so common today in the merchandising field wherever plastic articles are sold.

Engineering Needed

While informative and instructive labeling is a right step and something to be pushed, there is another step that should precede the labeling. This other step is the application of sound engineering in the development of the product. More often than otherwise, a product fails becaues the men who developed it did not understand plastics or how or where they should be used.

There should always be a reason for using plastics beyond blind enthusiasm roused by glamour publicity, and sound plastics engineering principles should be applied when these materials are employed.

SPE, through the Professional

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MIAMI VALLEY ELECTS

At the recent election of the Miami Valley Section of S.P.E., G. J. Wilson, B. C. Stupp, and M. J. Kemper were elected for a three-year term to the Board of Directors starting January 1, 1946. In the election to determine the length of the terms of the present directors, R. G. Chollar, H. J. Kasch, Jr., and G. F. Waite were selected to serve two -year terms and R. G. Fordyce, D. L. Meeker, and G. W. Carpenter were selected to serve one-year terms beginning January 1, 1946. The Board of Directors will meet in the near future and select the officers for the section for the coming year. These officers will be announced later.

The Miami Valley Section of S.P.E. had for their November meeting Dr. R. B. Akin of E. I. duPont de Nemours Company, Nylon Molding Powder Division, who spoke on the physical properties and applications of nylon molded parts The inherent physical properties of the nylon materials presented many applications in which tensile strength, water resistance, and similar properties are of prime importance. Included in the talk, Dr. Akin presented very interesting figures relating the physical properties of the molded parts to particle size of the original molding powder.

TOLEDO SCHEDULES MEETINGS JAN. 15 - FEB. 13

The Toledo Section met December 7 at the Toledo Yacht Club, where they heard Dr. Gordon Kline, Chief of Plastics Research at the Bureau of Standards, speak on "The Plastics Industry in Germany". The talk was accompanied with slides. Members of The American Chemical Society were invited to attend.

The January 15th meeting will feature Mr. L. F. Livingston of the Dupont Company, who will speak on the topic "Better Things for Better Living Through Chemistry".

The meeting for February is scheduled for the 13th, when Mr. Allan Bates, Manager of the Chemical and Metallurgical Department of Westinghouse Electric Co., Pittsburgh, will talk on "German Organization of Science and Industry Under the Naizs'. This talk will be given at the Doermann Theatre at Toledo University. It will be jointly sponsored by the Toledo Technical Council and the Toledo Section of the S.P.E.

,A meeting at the Tally-Ho Restaurant on November 27, heard a talk by Carl W. Sundberg on "Plastic Product Design". The meeting was also addressed by George Clark who talked briefly on the Annual Meeting and Plastics Exhibit in Detroit January 7-11.

CENTRAL OHIO NEWS

The Central Ohio Section met November 19 at Zanesville.

The President turned the meeting over to the Program Chairman, Mr. Charles D. Jones, who introduced Mr. J. W. Knight of the Fabri-Form Co. who provided the program.

Mr. Knight introduced Mr. George A. Morell of the Formica Insulation Co. who showed the film "The Story of Formica" in color with sound which was enjoyed by all.

Mr. Knight then took over in person and gave a talk on the type of work Fabri-Form Co. did. He had many interesting samples to augment his talk.

The President announced that there would be no meeting in December but our annual election would be held at the January meeting which will be sometime between the 1st and 5th of January, the exact date to be announced later.

New Directors Elected

(Continued from Page 1)

opening their Chicago office for the sale of molded and laminated plastics in 1928. At the beginning of the war, I was transferred to Fort Wayne, Indiana, as Commercial Engineer for the Plastics Divisions to serve the Midwest salesmen handling plastics for GE. In November, 1943, I was moved to Pittsfield, Mass., to serve as Commercial Engineer for the entire plastics sales organization and to undertake the post-war planning for the Plastics Divisions. My work here started in August, 1944. As Executive Engineer for Shaw Insulator Company, I am called upon to give engineering assistance to our transfer mold licenses. We are also developing a laboratory for the advanced study in the art of molding and do a considerable amount of engineering in the development of new applications for plastics.

In addition to the general book "Plastics"', I have also compiled, with the help of Wayne I. Pribble, a new text book on mold design, which is entitled "Plastics Mold Engineering".

R. B. BOWER

After graduating from a teachers college in Indiana the writer spent from 1927 to 1929 as a teacher in rural schools.

In the spring of 1929, I went to work at Delco-Remy Division of General Motors in the Process Department Tool Room. Since the tool room personnel was rather small, the writer was exposed to a diversified education in toolmaking.

In 1935 I was introduced to the plastics field by changing from the Process Tool Room to the Process Engineering Group. My work con-

(Continued on Page 6)

CLEVELAND GROWS

The annual meeting of the Cleveland Section, at which time election results are announced, will be held at The Cleveland Club on January 4, 1946. Election of directors and officers took place during the week of December 2nd. Ballots were mailed to all members to be voted upon and returned to the committee in charge. At this meeting on January 4th the Treasurer will give his report for the year.

At each meeting held in Cleveland much interest is shown in S.P.E. by the constant attendance of new faces. At the meeting of November 30th we had several visitors from other Sections as well as many guests. We list them here: Arthur Laverdiere, Tilton and Cook Co., Leominster, Mass. David and Mrs. Sloan of Lester Engineering Co., Cleveland, Ohio. Hary Slanta of General Tire and Rubber Co., Akron, Ohio. M. Lammertse, Goodyear Tire and Rubber Co., Akron, Ohio. Leonard W. Rettberg and Russell Mamere of Plastic Engineering, Inc., Cleveland, Ohio. E. W. Tylee of Varnish Products Co., Cleveland, Ohio. Ben Jerome, Dow Chemical Co., Cleveland, Ohio. G. G. Hawk, The Hoover Company, North Canton, Ohio. E. W. Pennington and Carl F. Benner of Tool and Die Journal, Cleveland, Ohio. O. H. Sando of Atlas Plastics Co., Cleveland, Ohio. George C. Gress, Lyon, Inc., Detroit, Mich. S. J. Smith of American Hard Rubber Company, New York City, and Mr. R. S. Wade of the same company, Akron, Ohio.

S. P. E. IN SAN FRANCISCO

On December 7th, there was a meeting of Plastics men in San Francisco, held with the view of establishing an S.P.E. Section there, which may possibly be called the Golden Gate Section. Mr. John G. Robb of American Molding Co., 355 Fremont St., San Francisco 5, California, called the meeting together. S.P.E. now has thirteen Sections, and we will be glad to have this proposed new Section.

PERSONALS

Mr. Mario J. Petretti, a member of the Newark Section, connected with the Noma Electric Corporation, 55 West 13th St., New York 11, New York, has now gone to Noma's Plastics Division, 178 Sargeant St., Holyoke, Mass., as Manager, Plastics Division.

Upon inquiry of the National Secretary-Treasurer, Mr. Peretti advises their plant is primarily a proprietory molding plant but do custom work.

Mr. Petretti is already requesting an S. P. E. Section be available to Holyoke.

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PARTIAL LIST OF CONV. HALL EXHIBITORS

Airtronics Manufacturing Co.
407 S. Dearborn
Chicago, 5, Illinois
Mr. K. V. Tindall

American Cyanamid Co.
30 Rockefeller Plaza
New York, 20, N. Y.
Mr. W. H. MacHal

American Insulator Corp.
New Freedom, Pa.
Mr. G. A. Johns

Ameriacn Technical Society
Vocational Publishers
Industrial Division
Drexel at 58th St.
Chicago, Illinois
Mr. W. R. Lasher

Amos Molded Plastics
Edinburg, Indiana
Mr. J. C. Kazimier

Bakelite Corp.
300 Madison Ave.
New York, 17, N. Y.
Mr. W. J. Connelly

Barnes & Reinecke
230 N. Ohio Street
Chicago, 11, Illinois
Mr. J. O. Reinecke

Borkland Laboratories
Sycamore Lake
Marion, Indiana
Mr. G. W. Borkland

Celanese Plastics Corp.
180 Madison Avenue
New York, N. Y.
Mr. D. S. Hopping

Chemaco Corporation
Berkeley Heights, N. J.
Mr. H. W. Harding

Chicago Molded Products Corp.
1020 No. Kolmar Ave.
Chicago, Illinois
Mr. J. W. Stokes

Continental Can Co., Inc.
Plastics Division
Cambridge, Ohio
Mr. J. E. Wolfe

Cruver Plastics
2460 W. Jackson Blvd.
Chicago, Illinois
Mr. M. L. Poust

Defiance Machine Works, Inc.
Defiance, Ohio
Mr. D. W. Champlin

Detroit Macoid Corp.
12340 Cloverdale Ave.
Detroit, Michigan
Mr. S. D. Bradley

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Exhibitors

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and drapes are of Vinyl Butyral coated cloth. Although the color, pattern and texture of the base cloth are retained.

The fabric has been rendered water-proof and stain-proof by application of Vinyl Butyral. Other members of the Monsanto family represented are Lustron, Polystyrene molding compounds in colorful chemical resistant refrigerator parts, household utensils, novelties and electrical parts, Resinox, Phenolic molding compounds, Nitron, Cellulose Nitrate sheets, rods and tubes, Vuelite for fluorescent lighting, Vuepak, rigid, transparent packaging material; Resimene, Melamine molding compounds and resins and Cerex heat resistant thermoplastic.

Tennessee Eastman Corp.

Tenite makes its bid to fame as the "foremost plastic of the automotive industry." For ten years, Tenite has been used on all leading makes of American automobiles — as steering wheels, dash panels, door handles, window regulators, gearshift levers, upholstery trim, control knobs. In wartime, Tenite was adapted to wartime vehicles. For jeeps alone, over three million Tenite steering wheels were made. Now, Tenite again rolls off the lines on peacetime vehicles.

Injection-molded at the fastest speeds attained with plastics, Tenite lends itself to assembly-line methods to help produce the most articles — and the best — at minimum cost. Tenite comes from the mold with a natural luster. It may be molded over rough metal castings to add beauty, pleasant "feel", and finish to rigid metal.

Toughness, resilience, dimensional stability, uniformity, unlimited colors, smooth surface, high luster, speed of manufacture, and a variety of formulas and flows to suit different physical requirements — these are the attributes of Tenite which have made it so successful for automotive products — and which fit it to countless other products. How widely differing these products are in use, size, and shape may be seen from the Tenite products on display at the SPE Exhibit.

Chicago Molded Products Corporation

Many of the most interesting and important wartime applications of molded plastics will be featured in the comprehensive exhibit of this leading Midwestern custom molder. The well known M-52 plastics fuze, the first successful one-piece radio antenna mast for aircraft, the T-17-B plastics microphone, and a host of other important applications, rang-

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PENNSYLVANIA NEWS

The Northwestern Pennsylvania Section of the Society of Plastics Engineers had its third regular meeting at the Hotel Corry, Corry, Pennsylvania, on Thursday, November 29.

The speaker for the evening was Mr. Russell R. Bradshaw, Molding Engineer of the Plastics Development Division, Dow Chemical Company. His talk made a very definite hit because of the practical and useful thoughts and ideas covered. Commencing with emphasis on the need for cooperation by a team (composed of engineering designer, artist, processing engineer, molder, and material supplier), Mr. Bradshaw presented pertinent suggestions on design, contouring, wall thicknesses, "mold release" conditions, co-efficient of expansion, draft, and color of plastics materials. One discussion that promoted questions afterwards was his report to the effect that highly polished mold cavities and mirror finished chrome plated cavities do not necessarily favor ease of ejection. Equally thought-provoking was his data proving that increase in draft does not pay off in the proportion one might expect. The speaker concluded his subject matter by discussing the manner of varying molding conditions to accomodate the materials used and to suit functional requirements.

Slides Featured

An added feature of the presentation was a group of slides, covering a trip of inspection of the injection molding industry in Germany, made by Mr. Goggins of Dow Chemical Company for the Quartermaster Corps of the United States Army. These pictures showed plants and equipment from German industry, including a 14 oz. injection machine, reported to be the largest found in Germany, predominantly the machines were of 2 oz. capacity or less, utilizing air pumps instead of hydraulic. To go with these small machines, round molds of few cavities and removable cores were typical. Statistically, 12,000,000 pounds of Thermo-plastic materials were used per month in war time Germany, including predominantly polystyrene (8,000,000 pounds per month), including a fairly high proportion of vinyls and nylon; their use of cellulose based materials was very low, becaues of a shortage of cellulose. A picture of the largest compression molding machine in the world (5,000 tons) was shown, also a mold weighing 28 tons used with that machine to produce protective cases for submarine batteries.

The Northwestern Pennsylvania Section will hold its January meeting at the Press Club in Erie, at which time the Officers plan to present the first of a group of speakers covering specialized subjects pertaining to tools, which should be of interest to die shops, molders, and purchasers of plastic parts.

The following charter members of the Northwestern Pennsylvania Section have been passed by the National Council: John J. Williams, Talon, Inc., Meadville, Pa.; Edward H. Roberts, General Electric Co., Erie, Pa.; Harold S. Clody, Nosco Plastics, Erie, Pa.; O. V. Johnson, Johnson Tool and Die, Erie, Pa.; Bruno C. Roehrl, Nosco Plastics, Erie, Pa.; William J. Phillips, Presque Isle Plastics, Erie, Pa.; Kenneth A. Rouzer, Presque Isle Plastics, Erie, Pa.; James P. Murphy, Erie Resistor Corp., Erie, Pa.; Paul C. Roche, Nosco Plastics, Erie Pa.; S. J. Myers, Warren Plastics, Warren, Pa.; Fred Wachter, National Erie Corp., Erie, Pa.; John R. Schumacher, Bliley Electric, Erie, Pa.

President's Message

(Continued from Page 2)

Activity Groups, can do the plastics industry a tremendous service by establishing engineering standards and standard practices for the utilization of plastics, and urging their adoption by manufacturers in all fields.

W. B. Hoey,
National President.

P.S.: This is the last time that I shall be meeting a deadline in this column. There will be another signature to the February President's Message. By the way, has anyone ever read this column up to now?

I have considered it a great honor to be president of SPE, and I pledge my full support to the incoming administration.

Personals

(Continued from Page 3)

Membership applicant Alex N. DiAddario, originally of Northwestern Pennsylvania Section, recently transferred to Buffalo Section, has announced the name of his new company as "Molds & Manufacturing, Inc.", of which he is President. This company, located at R. D. No. 5, Buffalo 6, New York, will specialize in the building of molds for plastics, rubber and die casting.

The formation of another new plastics injection molding company in the City of Erie, Pa., has been announced. "Quinn-Berry Corporation — Plastics Products" have commenced business at 2601 West 12th.

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Hall Exhibits

(Continued from Page 3)

Detroit Mold Engineering Co.
6686 E. McNichols
Detroit, Michigan
Mr. I. Quarnstrom

The DoAll Company
1301 Washington Ave., So.
Minneapolis, 4, Minn.
Mr. W. Howlett

The Dow Chemical Company
Midland, Michigan
Mr. M. J. Hooker

Durez Plastics & Chemicals Inc.
North Tonawanda, N. Y.
Mr. H. S. Spencer

Eclipse Moulded Products Co.
Milwaukee, Wisconsin
Mr. R. G. Geisler

Electric Auto-Lite Co.
Bay Manufacturing Div.
Bay City, Michigan
Mr. J. Kelso

Fabricon Products, Inc.
1721 Pleasant Ave.
River Rouge, Michigan
Mr. T. W. Noble

The Fabri Form Co.
Box 236
Cambridge, Ohio
Mr. J. W. Knight

R. R. Freitag Manufacturing Co.
1004 Grant Street
Akron, Ohio
Mr. O. Clare Conlan

General Electric Co.
700 Antionette
Detroit, Michigan
Mr. D. S. Milles — Mr. S. B. Jackson

General Hard Chrome Co.
Cleveland, Ohio
Attn.: Mr. Sperber

The General Industries Co.
Elyria, Ohio
Mr. O. W. Marsh

The Girdler Corp.
Thermex Division
224 E. Broadway
Louisville, Kentucky
Mr. Gene Wedereit

B. F. Goodrich Chemical Co.
Rose Building
Cleveland, 15, Ohio
Mr. Wayne Brinkerhoff

Hercules Powder Co., Inc.
Wilmington, Delaware
Mr. W. D. Sparks

Huntington Stamping & Plastics Co.
2971 Third Ave.
P. O. Box 1779
Huntington, 19, W. Virginia
Mr. H. C. Blake

The Hydraulic Press Mfg. Co.
Mount Gilead, Ohio
Mr. R. W. Powell

Industrial Plastics
Huebner Publications
2460 Fairmount Blvd.
Cleveland, 6, Ohio
Mr. G. E. Huebner

Interlake Chemical Corp.
Union Commerce Bldg.
Cleveland, 14, Ohio
Mr. J. R. Alderman

Lester Engineering Co.
2711 Church Ave.
Cleveland, Ohio
Mr. F. Ziesenheim

Libbey-Owens-Ford Glass Co.
Plaskon Division
Sylvan Ave.
Toledo, Ohio
Mr. H. S. Vandersall

Michigan Molded Plastics Co.
Dexter, Michigan
Mr. J. G. Rossiter

Midland Die & Engraving Co.
1800 W. Berenice Ave.
Chicago, 13, Illinois
Mr. A. J. Bachner

Midwest Production Machine Co.
652 North Fourth St.
Columbus, 16, Ohio
Mr. James W. Taylor

Modern Plastics
122 East 42nd Street
New York, 17, N. Y.
Mr. Alan S. Cole

Monsanto Chemical Co.
Springfield, Mass.
Mr. W. Lang

National Plastics, Inc.
Knoxville, 2, Tennessee
Mr. W. B. Hoey

Owens-Corning Fiberglas
Toledo, Ohio
Mr. W. R. Northlich

Peerless Molded Plastics, Inc.
401 Hamilton Street
Toledo, 2, Ohio
Mr. W. G. Skutch

Plastic Engineering, Inc.
8506 Lake Ave.
Cleveland, 2, Ohio
Mr. T. E. Orr

Plastics Magazine
185 North Wabash Ave.
Chicago, 1, Illinois
Mr. M. H. Froelich

Porter Cable Co.
Syracuse, New York
Mr. H. Ramsey

Preco Inc.
960 E. 61st St.
Los Angeles, 1, Cal.
Mr. P. Montgomery

Product Engineering
330 W. 42nd Street
New York, 18, N. Y.
Mr. N. B. Stanton

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Abstracts of Papers

(Continued from Page 1)

supplemented with slides showing fabrications molded by these pieces of equipment.

Physical properties of low and high pressure laminates, methods of molding, and different methods of impregnating are also shown.

PLASTICS MATERIALS IN THE RUBBER INDUSTRY

H. A. Winkelmann

The use of plastics by the Rubber Industry in the manufacture of products for various industrial and household applications is discussed. Vinyl, Styrene, Acrylic, Polythene, Silicone, Polyisobutylene, Phenolic, Polyamide and Rayon Plastics are being used in place of natural rubber and synthetic rubbers or as new construction materials in fabricating many products. The scope of these Plastics is constantly being increased by the introduction of new Polymers and Copolymers, as well as by improved methods of compounding and processing. Application of Plastics in various products and results of service tests are given. The unique characteristics of these Plastics as engineering materials are presented to show their versatility in meeting unusual service conditions.

SOME PHYSICAL PROPERTIES OF COTTON FIBERS, YARNS, AND FABRIC, INFLUENCING THEIR USE IN PLASTIC LAMINATES

Simon Williams and E. V. Painter

A brief general review of cotton fiber properties is presented from four viewpoints, namely: (1) those properties which are translated directly into the fabric, irrespective of yarn and fabric construction; (2) those properties which determine the nature of cotton spinning operations and hence delimit yarn quality; (3) the biological variations inherent in cotton fiber properties which markedly affect the physical uniformity of cotton textiles; (4) the use of cotton fibers in an unspun, non-woven web as a base for laminated structures. In this latter case, experimental data are presented indicating the quality of web-based laminates and the potential importance of staple length, fiber parallelization, fiber strength, and fiber lineness in influencing laminate properties. The data were obtained during the course of a research contract with the Office of Production Research and Development, War Production Board.

A brief discussion of yarn twist, including the reasons for the use of twist and effects of twist, is presented.

Finally, experimental data are presented relating to the inter-relationships existing between laminate

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Hall Exhibits

(Continued from Page 5)

Reichhold Chemicals, Inc.
Detroit, Michigan
Mr. C. J. Kaiser

Rohm & Haas Co.
Washington Square
Philadelphia, 5, Pa.
Mr. E. Greene

Sav-Way Industries
4875 E. Eight Mile Rd.
Detroit, 13, Michigan
Mr. A. R. Warbler

Schwab & Frank, Inc.
243 W. Congress St.
Detroit, Michigan
Mr. J. Frank

Shaw Insulator Co.
160 Coit Street
Irvington, N. J.
Mr. J. DuBois

South Bend Lathe Works
South Bend, 22, Indiana
Mr. P. M. Kenady

Standard Products Co.
505 Boulevard Bldg.
Detroit, 2, Michigan
Mr. R. G. Dailey

F. J. Stokes Machine Co.
Philadelphia, Pa.
Mr. E. S. Walker

Sundberg & Ferrar
814 Stephenson Bldg.
Mr. Sundberg

Tennessee Eastman Corp.
Kingsport, Tennessee
Mr. D. C. Gutherie

Udylite Corporation
1651 E. Grand Blvd.
Detroit, Michigan
Mr. Gunnar Lindh

The Van Dorn Iron Works Co.
2685 East 79th Street
Cleveland, 4, Ohio
Mr. D. Theobald

Waterburry Companies, Inc.
6460 Kercheval St.
Detroit, 7, Michigan
Mr. W. R. Wilson

Westinghouse Electric Corp.
511 Wood Street
Pittsburgh, Pa.
Mr. P. S. Grunnagle

Yardley Plastics Co.
142 Parsons Avenue
Columbus, Ohio
Mr. R. W. Rosel — Mr. C. Ebner

PIERCE WITH DOW

J. E. Pierce, a member of the Chicago Section, formerly with the Visking Corp., is now with Dow Chemical Co., in the Engineering Dept. Mr. Pierce resides at 2516 Rodd St., Midland, Mich.

NEW MEMBERS

The following were elected to membership at the Council meeting on October 26:

John Delmonte, Los Angeles; C. S. Wetzel, Philadelphia; R. H. Warren, Stratford, Conn.; I. E. Spirer, Meyer Sperber, Palmer Scoglund, G. H. Mains, H. D. Haley, Edmund Greene, J. C. Graf, R. L. Foote, R. J. Epple, George Elmendorf, P. A. Derham, W. I. Denton, R. Cunningham, G. B. Culbertson, R. B. Bishop, R. V. Beshgatoor, Philadelphia.

The following were elected to membership at the Council meeting on November 23, 1945:

Members—

W. L. Mitchell, Fred W. Shankweiler, O. W. Knight, J. I. Bent, I. F. Ferguson, A. J. Brunner, Hans Freeman, all of Chicago; Theodore Klebe, J. C. Cutler, C. W. Gaylor, Bernard Jaffe, W. E. Snyder, N. A. Skow, H. E. Shearer, D. D. Dundore, J. M. Herbert, E. E. Novotny, all of Philadelphia; R. E. Asmus, R. W. Welch, C. W. Kauffner, J. A. Ferguson, all of N. W. Penna.

Associates—

E. G. Rix, Chicago; A. J. Williams, John Petroski, E. McC. Yerkes, Philadelphia.

Juniors—

H. S. Stevenson, Philadelphia.

Directors Elected

(Continued from Page 3)

sisted of trouble shooting in the various molding departments, and departments where molded parts were used. This type work led to investigation of molding technique, tools, and molding material.

In 1937 my duties expanded, not only in trouble shooting in the plants, but included further duties of experimental work in the Plastics Laboratory. This work included testing of materials and new plastic products.

In 1940 I became Plastics Engineer at Delco-Remy and have continued in such capacity up to the present time.

I have served on the S.P.I. Subcommittee on Tolerances and Stability since 1943, and as alternate chairman for the past year.

The Indianapolis Chapter of S.P.E. was organized in 1944. After assisting in the organization of this chapter and serving as Vice President for one year, I was elected President for the year of 1946.

Recently I have had the honor of being chosen to serve on the National S.P.E. Board of Directors.

PHILIP MARVIN

Philip Marvin, originally a member of the Detroit Section of SPE, is retiring as President of the Milwaukee SPE Section. Marvin has been re-elected a Director of the Milwaukee Section, and is also a National Director.

As Director of Research and Development Engineering for the Milwaukee Gas Specialty Company, he is responsible for the design, development and application of electric controls for gas industry applications. His department also designs, develops and constructs special production equipment to be used in the manufacture of these controls.

As a writer and lecturer, he has contributed to technical publications and has spoken before technical and non-technical audiences on various phases of engineering design. Frequent requests come from non-technical audiences who wish a non-technical explanation of current topics, of technical nature.

Abstracts of Papers

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properties and such fabric properties as construction, weight, strength, crimp, etc. Data are also shown illustrating the effects of warp size and the desizing operation on laminate properties. Those data were obtained during the course of a research contract with the O.P.R.D., War Production Board, in cooperation with N.E.M.A.

INDUSTRIAL ASPECTS OF CONSUMER SPECIFICATIONS FOR PLASTICS

N. Rakas

It is pointed out that satisfactory plastic applications in greater part depend upon a large amount of control. The consumers' means of control rests with their specification.

A sound specification should embody two parts, one to specify the plastic materials; second, to control the plastic parts by means of some reliable performance tests. In order to write and exercise such a specification, one must be well acquainted with material properties, method of fabrication, and the conditions which his application undergoes in service. For example, temperature variation, sunlight, rough handling, and many other factors play an important role —not only for plastics, but even other materials.

In the final analysis, no specification is better than the quality of work and effort put into the development of plastic applications. There is a definite need for this control.

THERMOPLASTIC LAMINATES

R. J. Metzler

Colorful, lightweight luggage, motor housings and many other articles made from a new cellulose plastic material called laminate, which is

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Abstracts of Papers

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actually tougher than steel of equal weight and lighter than aluminum of equal thickness, are predicted in an address to be given before the Society of Plastics Engineers by Robert J. Metzler, Hercules Powder Company.

"The toughness, color possibilities and ease of fabrication of the cellulosic thermoplastic laminates are so outstanding that we consider cellulosic laminates as new properties with which fabricators and designers can work."

In the past, cost was a major obstacle to the large scale production of cellulose derivative laminates but that through several years of research, economical methods of preparing laminates and applications for laminates have been developed.

"Flat cellulosic laminate sheets can be turned into products with inexpensive equipment. Operations such as drilling, punching and riveting usually are unnecessary because the plastic in the laminate sheet forms its own heat-sealing adhesive, or a solvent-sealing process can be used."

Mr. Metzler says that extensive research has brought out that cellulose derivative laminates have a combination of desirable qualities—impact strength, unlimited color, and ease of fabrication—not possessed by any of the laminated phenolics.

The artist and industrial designer has no restrictions on his color schemes because color possibilities are endless. Plaids, flowered designs, or pigmented laminates are possible.

Some of the laminates are so tough that they cannot be broken on standard plastic testing equipment. In fabricating cellulosic laminates it is possible to make much deeper draws than with any other known laminate and wooden dies can be used when working with cellulosic laminates.

"Hercules established a cellulose derivative laminate pilot plant to seek information on the properties of these materials, to study costs and potential markets. We believe the results achieved indicate a promising future for cellulose derivative laminates."

DIMENSIONAL STABILITY OF PHENOL-FORMALDEHYDE PLASTICS

F. A. Martin

The work on which this paper was based was undertaken after the reported "growth" of molded phenolic cleaner parts held in storage for a number of years during the war. Moisture absorbtion with resultant swelling was suspected as the reason for this growth. Therefore molded plastic parts were stored under different relative humidity conditions, and the weight and dimensional changes during storage were measured periodically.

Data will be presented showing these weight and dimensional changes due to the various conditions of storage, and of subsequent heat treatment which was found to be an effective means of reducing swollen parts to their original dimensions.

As a result of this work the following conclusions were drawn:

1. Phenolic plastics will absorb sufficient moisture from humid air to cause an appreciable swelling.
2. The plastics will eventually reach an equilibrium condition with any given atmosphere.
3. The amount of swelling or growth is dependent on the type of filler in the plastic.
4. Growth due to moisture absorbtion is reversible, and heat treatment is an effective means of restoring swollen parts to their former condition.

THE ENGINEERING PROPERTIES OF FIBERGLASS REINFORCED PLASTICS

G. Slayter

The development of glass fibers as reinforcing agents now makes possible the utilization of plastics in many engineering applications from which they have heretofore been restricted by lack of suitable physical properties.

Plastics reinforced with glass fibers possess greater strength and impact resistance per unit weight than the structural metals; they do not rust, corrode, or decay; they are dimensionally stable, and they may be fabricated into very large shapes such as boat hulls and car bodies cheaply, conveniently, and without the use of costly dies and high-pressure presses.

Since the reinforcing elements are fibrous, the designer may, should occasion demand, orient the fibers in proportion to the amount of stress in any given direction, or he may distribute them throughout the object in such a manner as to give a uniform pattern in every direction.

Developments to date have largely been accomplished in connection with the newer "low-pressure" polymerizing resins. These are particularly suited for the fabrication of large parts, because they eliminate the necessity for using expensive high-pressure equipment.

INDUSTRIAL ASPECTS OF CONSUMER SPECIFICATIONS

G. W. Clark

This discussion starts with the consideration of "who is a consumer," particularly as related to plastics. The alternate relationships, such that

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FUTURE PENN MEETINGS

January— Subject: "Modern Developments in Plastic Injection Molding Machinery." Speaker from Improved Paper Machinery Company.

February— Subject: "Die Hobbing Technique." Speaker from Newark Die Comp

March— Subject: "Engraving of Mold Cavities." Speaker from Gorton Machine Tool Company.

April— Subject: "Applications and Ideas in Plastics." Speaker from DuPont.

We have already had acceptances from Newark Die and DuPont, who can provide speakers any time other than January. At the present time we await a response to our recent letter to Improved Paper Machinery Company. Gorton Machine Tool Company has not been approached as yet. We look forward to freezing the program as is, assuming that a favorable reply is received from Improved Paper Machinery Company.

Personals

(Continued from Page 4)

The Ohio Plastic Co., Frazeysburg, Ohio, announces that Mr. Charles Simmons has joined the firm. He will be Head of Engineering Sales.

Mr. Simmons was formerly Resident Electric Engineer for DeSoto Motor Corp., Division of Chrysler Corporation, Detroit, Michigan.

Another new member of the TOPCO organization is Mr. George Whittles, recently discharged from the U. S. Air Forces.

Presque Isle Plastics, another new and active Erie molding company, is adding several additional machines to its facilities, specializing in large injection molded castings; the Northwestern Pennsylvania Section has two members from this company, Kenneth A. Rouzer (Sectional Treasurer) and Wm. Phillips. The Bliley Electric Company of Erie, Pa., has activity under way in the plastics field, with plans for molding items assembled into their own products; Mr. John R. Schumacher of that company is an energetic sectional member of the Society. Warren Plastics has been represented by about a half dozen members and guests at the early meeting of this new Section, Mr. Stewart Myers, General Manager of that company, being a member and Director of the local Section; this company specializes in compression molded plastics closures. Sylvania Electric Products Company of Warren, Pa., is also developing compression molding facilities for their own products, the company being represented in the Section by Mr. A. L. Chapman.

Announcements of employment openings have been made to the Officers of the Northwestern Pennsyl-

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Abstracts of Papers

(Continued from Page 7)

the consumer of one item becomes the supplier of the next in the state of development, carries through the list from chemicals to finished plastic articles. The public is the ultimate consumer, so that everybody has an interest in all the steps leading up to the sale of any product.

An example is cited of a woman buying a hat with a plastic trim in which she is able to accept or reject the article on the basis of her preference for or against the plastic part. In contrast, a man buying an automobile is cited as an illustration of a consumer who makes his decision at present at least, without reference to the plastic parts on the car. The setting of specifications for these plastic parts is done, therefore, by the manufacturer of the automobile.

Public Knows Needs

The public and industry use many commodities containing resins. each commodity being directed at a specific use. The public may often educate their suppliers and they, in turn, often do research work to establish for the public the limiting and desirable characteristics of various commodities. In this way various specifications are arrived at which, in turn, regulate the choice of designs, materials, methods, and equipment all the way back to the supplier of basic chemicals.

In the packaging industry, the public is generally aware of what it requires of paper bags, tin cans, and glass bottles. It also knows that it is necessary to supply cans and bottles with adequate means of sealing the opening in order to realize the efficiency of packaging called for. This means, in order to be adequate, must be readily applied, remain firm and be readily removed. The neck of the can or bottle may be fitted with an inner sealing means such as a stopper; a top sealing means such as a closure; or a side sealing means such as a jar lid. The public further specifies that the closure shall not leak, that it shall be strong enough for application and removal forces, that its sealing surface shall withstand the contents of the package with which it comes in contact, and that preferably the closure shall be reusable. Numerous tests have been conducted to enable the selection of proper sealing surfaces for a wide variety of products. Other tests have established the design, the materials, equipment and conditions of manufacture, so as to realize the functional purposes of the closure and to obtain adequate strength.

In addition to the above, the public has recognized the sales appeal of an attractive closure and has shown approval of certain designs which have become stock items. Others, willing to pay more, invest it in private designs and custom molding where further functional use can be included with the closures. Examples are liquor pour-outs, spray tops, salt and pepper tops, nursery bottle tops, and containers such as inhalers for medicaments. To the functional advantages mentioned can be added also the individuality of design and the attractiveness available in a complete range of colors. It is obvious that the buyer's is the directing hand as to what shall be made and that others can furnish the guiding hand as to how and where.

Program

(Continued from Page 1)

"Plastics in the Rubber Industry", Dr. H. A. Winkelman, Dryden Rubber Company.

II—MOLDING TECHNIQUE
Chairman, Mr. J. C. Kazimier, Amos Molded Plastics.
"German Plastic Fabrication Methods", Mr. W. Goggin, Dow Chemical Company.
"Special Extrusion Molding", Mr. W. S. Prendergast, Carter Products Corp.

TUESDAY, JANUARY 8, 1946

9:00 A. M.—Registration.
9:30 A. M.—Technical Sessions.

III—LAMINATES SMPOSIUM ....
Chairman, Mr. Harry Kline, Reichhold Chemicals, Inc.
"Cotton in Relation to Laminates", Mr. Simon Williams and Mr. E. V. Painter, National Cotton Council.
"Semi - Structural Fabrications", Mr. C. F. Marschner, Forest Products Lab.
"Engineering Properties of Fiberglas Reinforced Plastics", Mr. G. Slayter, Owens-Corning Fiberglas Corp.

— RECESS FOR LUNCH —

1:30 P. M.—LAMINATES (cont'd)
(Subject to be announced later.)
Dr. Harry F. Lewis, Inst. of Paper Chemistry.
"Developments in Plastics in Germany During the War", Dr. Gordon Kline, National Bureau of Standards.
"Decorative Laminates", Mr. L. C. Chesley, American Cyanamid Company.
"Low Pressure Molding — Materials and Technique", Mr. T. Walter Noble, Fabricon Products, Inc.
"Resin and Raw Material Requirements from a Laminator's Standpoint", Dr. E. R. Perry, Westinghouse Electric & Mfg. Co.
"Thermoplastic Laminates", Mr. R. J. Metzler, Hercules Powder Company.

6:30 P. M.—
ANNUAL SPE BANQUET, Wardell Sheraton Hotel.
Mr. Russell Barnes, Feature Writer, Detroit News.

WEDNESDAY, JANUARY 9, 1946

9:00 A. M.—Registration.
9:30 A. M.—Technical Sessions.

IV—TOOL DESIGN ....
Chairman, Mr. R. G. Dailey, Standard Products Co.
"Compression and Transfer Molds", Mr. B. F. Hantz, American Insulator Co.
"Kirksite Plastic Molding Tools", Mr. W. W. Broughton, National Lead Co.
"Tooling Aspects of Cast Plastics", Mr. Clinton Rector, Catalin Corporation.

V—COATINGS
Chairman, Mr. J. R. Turnbull, Monsanto Chemical Co.
"Plastics As Coatings", Mr. P. F. Corbin, Textileather Corporation.
"Polyvinyl Butyral Coatings", Mr. David S. Plumb, Monsanto Chemical Co.
"Metal Plating Over Plastics", Mr. F. T. Marx, Monroe Auto Equipment Co.

— RECESS FOR LUNCH —

1:30 P. M.

VI—CONSUMER SPECIFICATIONS
Chairman, Mr. R. Chollar, National Cash Register Co.
"Consumer Specifications and Their Applications", Mr. G. F. Clark, Owens-Illinois Glass Co.
"Industrial Aspects of Consumer Specifications", Mr. N. Rakas, Chrysler Corporation.
"Stability of Phenol Formaldehyde Plastics", Mr. F. A. Martin, The Hoover Company.

VII—PRODUCT DESIGN .. .. ..
Chairman, Mr. J. A. Hill.
"Products of the Future", Dr. Heinrich Bulchdorf, Barnes & Reinecke.
"Product Design From a Molder's Viewpoint", Mr. William L. Hess, Midwest Plastic Products.
"What Design Engineers Expect of the Professional Activities Committee of the SPE", Mr. John Sasso, Managing Editor Product Engr.

Personals

(Continued from Page 7)

vania Section. Draftsmen and design engineers, experienced in the plastics field or anxious to work in this field, are requested to contact the Secretary of the Section.

The Ohio Plastic Company at Frazeysburg, Ohio have completed additions to their molding plant. They also increased their sales and engineering departments. Additional plans are in progress for further expansion of the plant to give addi-

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MIAMI VALLEY NEWS

On Thursday evening, January 3, Dr. Howard K. Nason of Monsanto Chemical Company will address the Miami Valley Section of S.P.E. on "Trends in the Functional Utilization of Plastic Materials". Dr. Nason is a well known authority on Plastics, being very active on the A.S.T.M. committees on testing of plastics. His topic should be one of interest to all.

At the December 6 meeting a dinner party was held before the meeting. At this occasion the members brought their wives and Christmas atmosphere prevailed. Music and entertainment highlighted the festivities.

At the regular meeting later which the wives also attended, Mr. George Borklund of the Borklund Laboratories in Marion, Indiana, gave a very interesting discussion on "Plastic Sheet Forming and Fabrication". The evening was thoroughly enjoyed by all.

M. V. Kemper of the Miami Valley Section has recently become associated with the Improved Paper Machinery Corporation, Nassau, New Hampshire as Sales Engineer.

ew members who have been accepted into the section recently as regular members are: James J. Scherrer, National Cash Register Company; Stephen D. Marcey, National Cash Register Company. We welcome these new members into the society.

Efforts have been made recently by the Miami Valley section membership committee headed by Jack Braden to interest individuals in the Cincinnati area in S.P.E. Plans are to incorporate members from that area into the Miami Valley section or, if sufficient interest is obtained, to initiate a new section at Cincinnati with whom we could hold joint meetings throughout the year.

Exhibitors

(Continued from Page 4)

ing from tiny, low-loss parts for electronic devices, to massive housings for circuit breakers will be shown.

"The Story of Plastic Molding," CMPC's well known booklet, containing useful information on selection of plastic materials, mold making, molding methods, and finishing, will be aavilable to visitors on request.

Van Dorn Midget Molder

The Van Dorn Midget Molder, designed for research and testing in connection with the injection of thermoplastics, will be shown at the S.P.E. Detroit Convention, by The Van Dorn Iron Works Company of Cleveland.

This Midget Molder, in addition to its use in laboratories and research departments, is finding an increased use by manufacturers and molders for the production of smaller quantities of plastic pieces weighing less than one ounce.

Visitors can try the mechanical operation of the Midget Molder although actual molding operations will not be attempted.

Hercules

Hercules Powder Company's exhibit at the Society of Plastics Engineers convention in Detroit will feature the company's part in the research and development of the VT-Fuze.

Recognized as one of the most important wartime developments and rated by the Navy Department as a top-drawer secret, Hercules developed and produced millions of electrical detonators and supplied many tons of theyl cellulose used in the production of the injection molded plastic nose of the fuze.

The company's exhibit will feature a VT-Fuze fitted into a five-inch shell, which when activated will light up the entire exhibit, showing a wartime application and then flashing back to peacetime uses of materials produced by the Cellulose Products Department.

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BUFFALO MEETS

The November meeting of the Buffalo Section of S.P.E. was held at the Hotel Westbrook "Blueroom."

Mr. Frank W. Steere Jr., Technical Service Engineer, of the B. F. Goodrich Chemical Company, Cleveland, Ohio, spoke on the physical properties and uses of "Geon," a polyvinyl plastics material. Mr. Steere exhibited many samples showing how this plastics material was used in the war effort, exploiting its excellent abrasion resistance, resistance to corrosion, mildew and other fungi found in the humid air of the South Pacific.

The next speaker, Dr. James T. Grey, of the Curtiss-Wright Research Laboratory, gave an interesting talk on General Observations of Germany's Aircraft and Plastics Companies.

During his three months tour in Germany, sponsored by the T.I.T.C., Dr. Grey took many interesting photographs of German cities and industries. These photographs were projected on a screen, to supplement Dr. Grey's remarks.

WEAR YOUR S. P. E. PIN

S.P.E. pins may be purchased either from your local Secretary, or from the National Secretary, L. S. Shaw, 3269 Lansmere Road, Cleveland 22, Ohio, for one dollar. Since any members pin is always on his other suit, it's a good idea to have a pin for every suit.

Personals

(Continued from Page 8)

tional molding room space. Mr. George N. Edwards, General Manager of Ohio Plastics is a member of the Columbus Section S.P.E.

Mr. R. L. (Bob) Davis, formerly District Project Engineer, Plastics Division of Continental Can Co., Inc., Cambridge, Ohio has accepted the position of Western Sales Manager for Plastic Manufacturers, Stamford, Conn. Bob is a member of Columbus Section.

John E. Henry of Continental Can Co. has been transferred to the Plastic Plant at Cambridge, Ohio. Formerly a Toledo member, he will affiliate with the Central Ohio Section.

Mr. S. D. Hiltebrant has left the Detroit office of the Bakelite Corp., to become Sales Manager of General Industries of Elyria, Ohio, Plastics Division, effective December 17. A goodly number of his associates in the Detroit Section gave him a farewell party. He will be greatly missed by the Detroit Section.

Mr. Robert Cole has been assigned to the Detroit office of the Bakelite Corp. He will service the Eastern Ohio molders. Mr. Cole is an applicant for membership in the Detroit Section.

Robert B. Bowman, tool designer with Douglas Aircraft at Park Ridge, Ill., who is an associate member of the Chicago Section, has been transferred to his company's plant at El Segundo, Calif. Mr. Bowman will reside at 11623 Inglewood Avenue, Hawthorne, Calif. We now have possibly a score of members in Los Angeles and vicinity.

Don G. Griffith of the Central Ohio Section, formerly of Continental Can of Cambridge, is now one of the founders of the Newark Plastic Engineering Co., at 130 Locust St., Newark, Ohio. They will specialize in tool engineering, mold, jig and fixture design.

Mr. William Conroy has been appointed at Erie Resistor Corporation as Sales Manager of the Plastics Division to replace Mr. James P. Quinn; Mr. Conroy has been territorial representative for the company, having previously been an expeditor for the Army-Navy Electronics Procurement Agency. Mr. Robert Kling has been appointed Chief Mechanical Engineer to succeed Mr. L. L. Berry. The Erie Resistor Corporation has purchased additional property in Erie for expansion of its plastic manufacturing activity.

Milton L. Poust of the Chicago Section, residing at 526 Solbourne Road, Riverside, Illinois, has resigned his connection with Werner Mfg. Co., and has joined the staff of the Cruver Mfg. Co., 2456 Jackson Blvd., Chicago 12, Ill.

INDIANAPOLIS ELECTS

The Indianapolis Section has elected the following officers for the year 1946.

President, R. B. Bower of the Delco Remy Division of General Motors, Anderson, Ind.

Vice-President, A. J. Queisser of Queisser Bros., 108 East 9th St., Indianapolis, Ind.

Secretary - Treasurer, W. Oscar Gebhart of the Delco Remy Division of General Motors, Anderson, Ind.

Directors elected were: Dale Amos of Amos Molded Plastics Co., Edinburg, Ind.; R. W. Itull of the Rex Mfg. Co., Connersville, Ind; and W. S Aspinwall, Indiana representative for Kurz-Kasch, Inc., of Dayton, Ohio.

S. P. E. GROWTH RAPID

The announced goal of the S.P.E. one year ago, was to double the number of sections and double the membership. The goal has been more than reached; from six sections, we now have thirteen, with others in the process of formation. In a similar manner, the membership has been more than doubled. All this accounts for the pleasant smile on the face of our Secretary.

ATLAS PLASTICS OPENS

A new Plastic firm is being formed and will locate in the Cleveland area. This will be a partnership and the owners are Mr. Steven A. Klein and Mr. O. H. Sando. The company will operate under the name of Atlas Plastic Company and their operations will consist of extruding thermoplastics as well as fabricating. Mr. Klein has been a member of the Cleveland Section of S.P.E. for some time. Mr. Sando has made application for membership.

New Directors Elected

(Continued from Page 6)

A graduate of the Rensselaer Polytechnic Institute, Marvin has seen service with the General Electric Company and the Bendix Aviation Corporation in New York City.

Associated with a number of technical societies in addition to the Society of Plastics Engineers, his affiliations include the American Gas Association, Society of Automotive Engineers, American Institute of Electrical Engineers, American Physical Society and a number of others. In addition to these Societies, Marvin was elected first an associate and later a full member of the honorary scientific society Sigma Xi and is a member of the engineering honorary society of Tau Beta Pi.

Exhibitors

(Continued from Page 9)

Lester-Phoenix

Lester-Phoenix, Incorporated has booths 120-121 at the Detroit S.P.E. Convention Hall exhibition where information on the new Lester Injection Molding Machine for Plastics is available.

The new design machine has one piece cast steel frame, new, larger die height adjusting screw still actuated by a single hand crank—new, heavier toggles and cam lock supports with 60% more die movement and opening, and the new Lester solid plunger vertical injection cylinder with Internally Heated Torpedo and three external resistance type heaters.

Those in attendance will be Mr. Nathan Lester, President; Mr. W. H. Schwartz. Chief Engineer; Mr. Fred C. Ziesenheim, Sales Manager; Mr. Elmer C. Maywald, Chicago Representative; Mr. A. B. Geers, Cincinnati Representative, and others.

The Girdler Corp.

"The Thermex Division of The Girdler Corporation features the latest addition to the "Red Head" series of dielectric high frequency heating units. Transparent openings are provided in both sides of the equipment to permit visitors to inspect the internal construction of the 5 KW equipment.

Two large meters are mounted above the tray opening. One of these indicates the number of seconds required for preheating the sample preforms and the other indicates the temperature rise obtained during this preheating period.

Also featured is the new 24 page Thermex booklet entitled "High frequency heating."

Bakelite

Among the many items presented in Bakelite Corporation's section of the Society of Plastic Engineers Exhibit are: a new boat produced without metal fastenings; a plastic covered sofa; a kit which was used for the desalination of water for our aviators during the war and many other examples of how plastics aid in a more efficient world for industry and a higher standard of living for the public.

The boat is produced by the Winner Manufacturing Company by the low pressure method of laminating. The hull alone weighs 73 pounds. Complete with woodwork, seats, and trim, the boat still weighs under 150 pounds and two people can handle it easily. It is 10 feet in length and has a 4-foot beam. The hull is a sandwich composed of two outer layers of lightweight duck, the core of fiber matting, and an inner layer of heavy duck. This sandwich is then impregnated with BAKELITE polystyrene laminating varnish XRS-69. BAKELITE polystyrene laminating varnishes were used especially for the production of all-important radar domes for naval planes throughout the war. The woodwork of the new dinghy is bonded with BAKELITE phenolic resorcinol cold-setting glue BC-17613, a bonding agent which when set is stronger than the material it bonds. The plastic dinghy—it is 50 per cent BAKELITE plastics by weight—is self-buoyant and if punctured will not sink. It will carry a load of 1200 pounds and still retain 8 inches of freeboard. Molded in one piece the boat is seamless.

Also included in the BAKELITE section of the exhibit are many elastomeric plastic items such as grommets, window stripping, and cowling stripping produced from VINYLITE plastic elastomerics.

Laminates of high, low and contact pressures in which BAKELITE resins were employed are also shown in a diversity of shapes. The invisible part that plastics play in our world today is also evident in coating panels, and wire insulation as well as bonding resins for wood.

S. P. E. BANQUET JAN. 8

The Society of Plastics Engineers, Inc. annual banquet will be held Tuesday night, January 8th, at the Wardell-Sheraton Hotel, 6:30 P. M. Entertainment will be produced by the Ford Ramblers and the guest speaker will be Mr. Russell Barnes, foreign affairs commentator, editorial staff, The Detroit News.

Mr. Barnes just returned from distinguished service in World War II as Director of Psychological Warfare Branch, Staff Section of Allied Forces Headquarters, Mediterranean Area.

Mr. Barnes, who was born in Huntington, Indiana, August 31, 1897, graduated from the University of Michigan in 1920, where he worked on student publications and was a member of the Ann Arbor Bureau of The Detroit News from 1918 to 1920. He wrote the books of two Michigan Union operas, "George Did It" and "Top of the Morning", with Thomas Dewey of Owosso, now Governor of New York, singing the principal role.

Mr. Barnes commanded some 4,600 American, French, Italian and British army men and civilians in the conduct of psychological warfare against the enemy in North Africa, Italy and the Balkans, and in Southern France in connection with the invasion in August, 1944. He was responsible for the overall distribution of news in Italy, the distribution of nearly four billion propaganda leaflets by airplanes, artillery shells and other means, and the operation of a dozen radio stations.